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DrägerService®

Dräger

Field Service Procedure

Part Number: SP00198
Rev: -
Date: 7 June 2000

Piping Modification, MRI

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Piping Modification - MRI

Modification Procedure

General Warnings and Cautions that apply to this Service Procedure:

WARNING: Any person involved with the setup, operation, or maintenance of the Narkomed MRI anesthesia system must be thoroughly familiar with the instruction manual for this product.

WARNING: Do not place any object on this machine unless it is specifically labeled to be used in an MRI scanning room and on the Narkomed MRI anesthesia system. Objects placed on this machine that are not designed for use with this anesthesia system may be strongly attracted to the magnet and may cause serious injury or death when the machine is used in an MRI scanning room.

WARNING: Always lock the casters after this anesthesia machine has been positioned in the MRI scanner room. Magnetic attractive forces between the magnet and the anesthesia machine may cause unintentional movement of the anesthesia machine if the casters are unlocked.

WARNING: The anesthesia machine must be removed from the MRI scanner room before servicing the machine. Do not enter the MRI scanner room with any tools or instruments. These items may be strongly attracted to the magnet and may cause serious injury or death when brought into an MRI scanning room.

WARNING: Do not bring any ferromagnetic tools or equipment into the scanning room. Ferromagnetic objects (made of steel, iron, or stainless steel) are strongly attracted to the magnet and can become harmful projectiles.

WARNING: Use only nonmagnetic (aluminum) E-cylinders with this machine. Steel cylinders can cause serious injury or death if brought into an MRI scanning room.

CAUTION: When moving the machine, be sure to set the absorber to its lowest position on the absorber pole. To avoid personal injury or damage to the unit, do not use the absorber pole to push or pull the machine. It is recommended that two people move the machine to aid in maneuverability on inclines, around corners, and over raised thresholds.

Modification Procedure (continued)

1. Disconnect all pipeline hoses and set the System Power switch to ON.

2. Close all cylinder valves except for the O_2 valve.

3. Set the oxygen flow to 5 L/min.

4. Open the other gas flow control valves to drain pressure from the system.

5. Close the O_2 cylinder valve and close the flow control valves. Press the O_2 Flush valve to drain the oxygen pressure from the system.

6. Set the System Power switch to STANDBY.

7. Remove the screws securing the rear cover to the flowmeter housing and remove cover.

8. Using a 9/16 in. wrench, loosen the compression fittings (4x) and remove two copper tubes attached to the vaporizer manifold (see Figure 1). Discard the removed copper tubes.

9. Using the replacement copper tubes furnished in the kit, install them as shown in Figure 1, and tighten the compression fittings firmly.

10. Verify that the copper tubes are routed per the illustration in Figure 1.

11. Reinstall the flowmeter housing rear cover.

12. Reinstall any previously removed E-cylinders.

WARNING: Use only nonmagnetic (aluminum) E-cylinders with this machine. Steel cylinders can cause serious injury or death if brought into an MRI scanning room.

NOTE: The vaporizer does not have to be drained in order to complete the following steps.

WARNING: DO NOT tilt the vaporizer more than 45° at any time.

13. Carefully remove any mounted vaporizer and associated O-rings, or cover block, from the vaporizer manifold block.

14. Open the oxygen E-cylinder valve.

15. Turn the System Power switch to ON.

16. Open the oxygen flow control valve to 4 L/min.

17. Verify that flow comes out of left-hand port of the vaporizer manifold block.

18. Turn off oxygen flow control valve.

NOTE: Before installing a vaporizer, verify that the vaporizer has O-rings at the inlet and outlet ports.

19. Carefully reinstall the vaporizer or cover block using the screws removed previously in step 13.

20. Perform the PMS procedure given in Section 6 of the Service Manual.

21. Carefully inspect the machine to verify that no loose screws, washers, or tools are left on or in any part of the machine.

22. Restore the machine to its original customer configuration and location.

23. Complete the form (after Page 4) and return it to DrägerService within 24 hours of completing the modification.

Modification Procedure (continued)

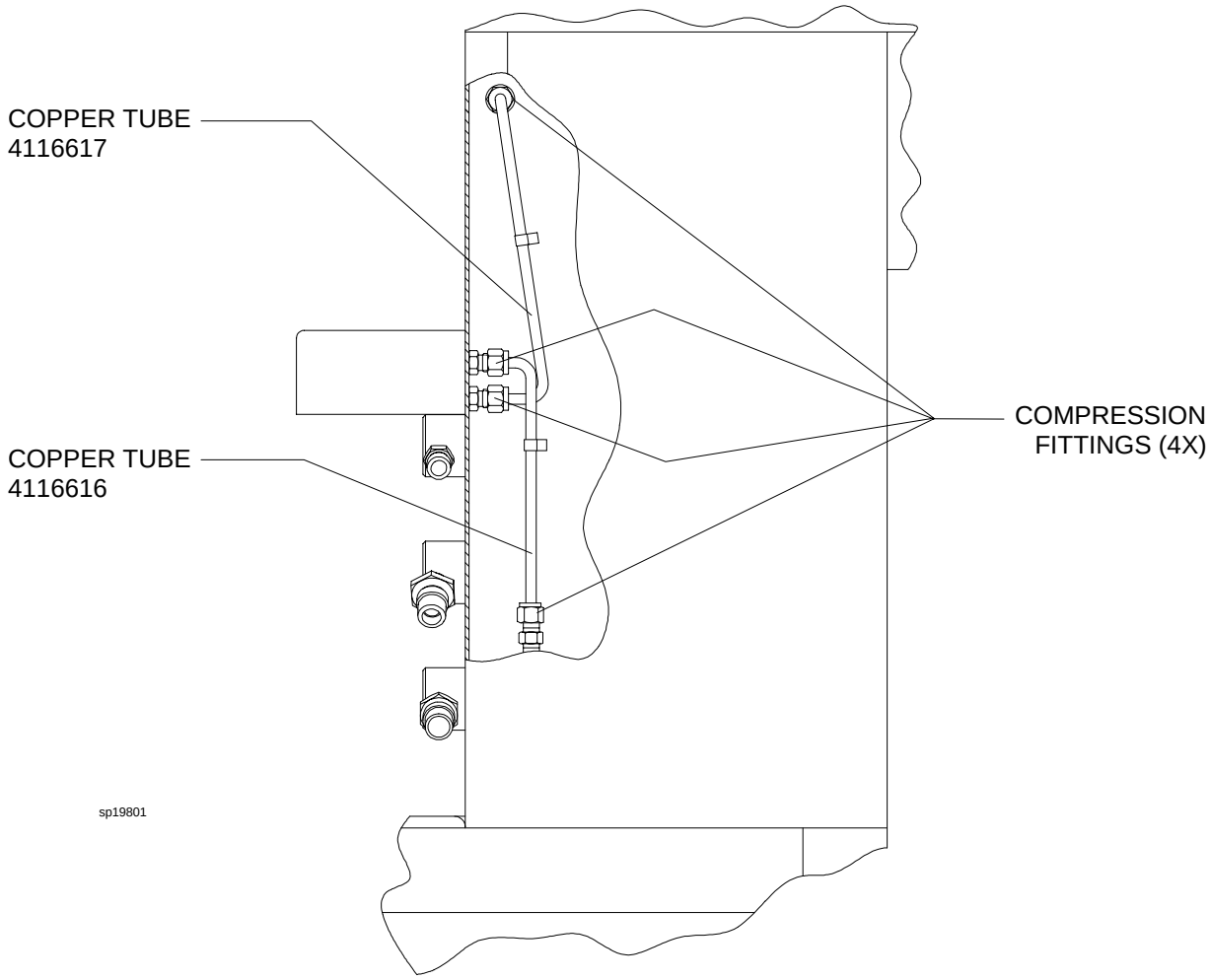

FIGURE 1. New Copper Tube Locations

Modification Procedure (continued)

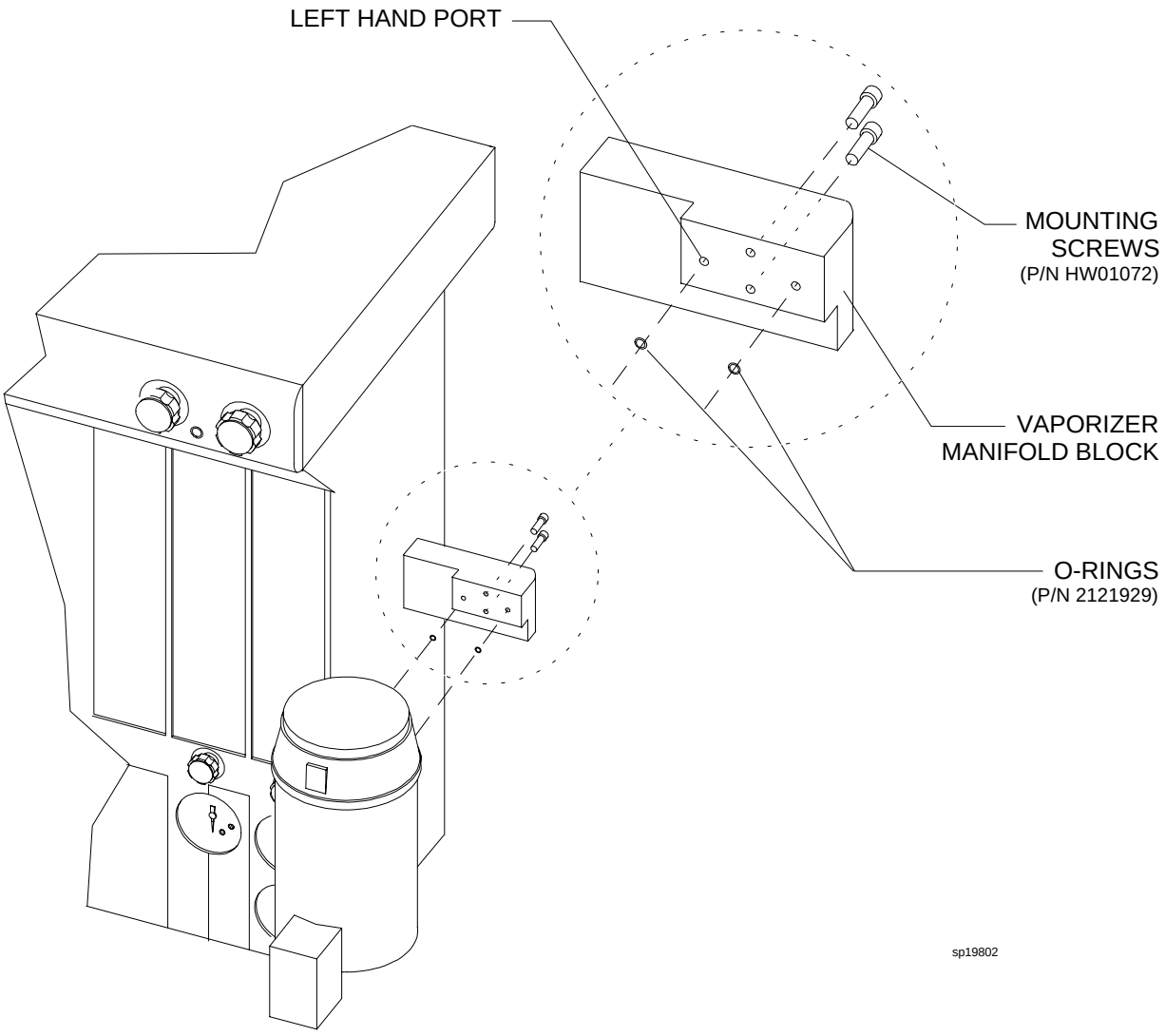

FIGURE 2. Removing/Installing the Vaporizer

Return Form

NM MRI Vaporizer Piping Modification

Hospital _____

Distributor _____

Narkomed MRI Serial # _____

Core-M Monitor Serial # _____

1. Verify vaporizer manifold piping modification is complete per Field Service Procedure SP00198. _____
2. Verify fresh gas flow is present at left hand port of the vaporizer manifold. _____
3. Perform a PMS per Section 6 of the NM MRI Service Manual. _____

(✔)

Service Representative (print) _____

Service Representative (sign) _____

Date: _____

Return this form to:

DrägerService
3122 Commerce Drive
Telford, PA 18969
Attn: Al Myers
Fax: 215-723-5935

DrägerService®

Dräger

TECHNICAL SERVICE BULLETIN # 169

Product: Narkomed MRI

Date: June 23, 2000

Reference Doc: SP00198

Distribution: All Authorized Service Organizations, DrägerService

Reason/Rationale: Dräger Medical Inc. (DMI) has released a modification to update the copper piping connected to the vaporizer manifold block on all existing Narkomed MRI units in the field prior to serial number 10143.

Solution/Procedure: Complete Field Service Procedure SP00198 on all field NM MRI units prior to serial number 10143.

Upon completion of SP00198 on each NM MRI, complete a return form located in SP00198 and promptly forward to DrägerService via fax or by mail.

Timing/When: Machines to be modified and forms returned by July 24, 2000.

Costs: Labor - Warranty
Parts - Kit is supplied at no charge

Ordering Info/Parts: Order 1 each/unit, Kit -Vapor Block Pipes, Part number - 4116615

Contact your CSR to process order. Reference TSB # 169 and machine serial number on Purchase Order.

If you have any questions, please contact Technical Support by phone at 1-800-543-5047 of by fax at 1-215-721-5789.

North American Dräger and
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